

ABSTRACT

0039 A method for plasma etching is disclosed with improved etching selectivity for a nitride containing DARC and a low-k dielectric layer. Plasma chemistry is controlled by adjusting a nitrogen to oxygen ratio to achieve improved etching selectivity in both nitride containing and low-k dielectric layers. Nitrogen to oxygen ratios are adjusted to control etching of for example, a DARC nitride containing layer, and Carbon to fluorine ratios are additionally adjusted to control etching in a low-k dielectric layer.